					DEPARTMEN <sup>*</sup>	T OF NA	F UTAH TURAL RESO GAS AND MIN			AMENDE	FOR			
			APPLICAT	ION FOR	PERMIT TO DRILL				1. WELL NAME and NU	JMBER C Tribal 12	2H-25-46			
2. TYPE	OF WORK	DRILL NEW WE	ELL (📵 R	EENTER P8	A WELL DEEPEN	N WELL [	)		3. FIELD OR WILDCAT	T ALTAMO	ONT			
4. TYPE (	OF WELL		Oil Well	Coalb	ed Methane Well: NO		~		5. UNIT or COMMUNIT	FIZATION A	AGREEME	NT NAM	E	
6. NAME	OF OPERATO	R		BILL BARRE					7. OPERATOR PHONE	303 312-	8164			
8. ADDRI	ESS OF OPERA		099 18th Str	eet Ste 23	00, Denver, CO, 80202				9. OPERATOR E-MAIL	- ers@billbaı	rettcorp.c	om		
	RAL LEASE NU L, INDIAN, OR				11. MINERAL OWNERS	SHIP DIAN 📵	STATE	) FEE (	12. SURFACE OWNERS	SHIP DIAN (	STATE	) FE	E ( )	
13. NAM	E OF SURFAC	E OWNER (if box	12 = 'fee')						14. SURFACE OWNER	PHONE (i	if box 12 =			
15. ADDI	RESS OF SURI	FACE OWNER (if I	oox 12 = 'fee'	')					16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
		OR TRIBE NAME			18. INTEND TO COMM		PRODUCTION	FROM	19. SLANT					
(if box 12 = 'INDIAN')  Uintah and Ouray							ling Applicatio	n) NO 📵	VERTICAL DIF	RECTIONAL	. 🔵 но	ORIZONT	AL 📵	
20. LOCATION OF WELL					OOTAGES	QT	R-QTR	SECTION	TOWNSHIP	RAN	IGE	МЕ	RIDIAN	
LOCATI	ON AT SURFA	CE		2019 F	SL 802 FEL	1	NESE	25	4.0 S	6.0	W		U	
Top of	Uppermost Pr	oducing Zone		2020 F	SL 1301 FEL	1	NESE	25	4.0 S	6.0	W		U	
At Total Depth 200					SL 810 FWL	N	wsw	25	4.0 S		ow u			
21. COUNTY 22. DISTANCE TO NEAR DUCHESNE							E <b>ASE LINE (Fe</b> 10	et)	23. NUMBER OF ACRE	<b>ES IN DRIL</b> 640				
					25. DISTANCE TO NEA (Applied For Drilling		oleted)	POOL	26. PROPOSED DEPTI	<b>1</b> 0: 9312	ΓVD: 5738			
27. ELEV	ATION - GROU				28. BOND NUMBER				29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE					
		6828			Hole Casing	LPM8874725 43-180								
String	Hole Size	Casing Size	Length	Weigh			x Mud Wt.	Illation	Cement Sacks Yield Weight					
Cond	26	16	0 - 80	65.0	Unknown		8.8		No Used		0	0.0	0.0	
Surf	12.25	9.625	0 - 1500	36.0	J-55 ST&C		8.8	Halliburt	on Light , Type Unkn	iown	190	3.16	11.0	
								Halliburton	Premium , Type Un	known	210	1.17	15.8	
I1	8.75	7	0 - 6177	23.0	P-110 LT&C		9.2		Unknown		280	3.14	11.0	
L1	6.125	4.5	0 - 9312	11.6	P-110 LT&C	-	9.5		Unknown No Used		130	0.0	0.0	
LI	0.125	4.5	0 - 9312	11.6					No Osed		0	0.0	0.0	
					A	ATTACH	IMENTS							
	VE	ERIFY THE FOL	LOWING A	RE ATTA	CHED IN ACCORDAN	NCE WIT	TH THE UTAI	H OIL AND GAS	CONSERVATION G	ENERAL	RULES			
<b>I</b> ✓ V	VELL PLAT OR	MAP PREPARED I	BY LICENSED	SURVEYO	R OR ENGINEER		<b>I</b> COMP	LETE DRILLING F	LAN					
A	FFIDAVIT OF S	TATUS OF SURFA	CE OWNER	AGREEMEN	IT (IF FEE SURFACE)		FORM	5. IF OPERATOR	S OTHER THAN THE LE	ASE OWN	ER			
<b>№</b> D	IRECTIONAL S	URVEY PLAN (IF	DIRECTIONA	LLY OR H	DRIZONTALLY DRILLED	D)	торос	GRAPHICAL MAP						
NAME V	enessa Langm	acher		ТІТ	LE Senior Permit Analys	st		PHONE 303	312-8172					
SIGNAT	URE			DA	TE 03/05/2012			EMAIL vlang	macher@billbarrettcorp	o.com				
	IBER ASSIGNE 0135127			API	PROVAL			Perm	Lydd t Manager					

#### **DRILLING PLAN**

#### BILL BARRETT CORPORATION

LC Tribal 12H-25-46

SHL: NE SE, 2019' FSL and 802' FEL, Section 25, T4S-R6W BHL: NW SW, 2004' FSL and 810' FWL, Section 25, T4S-R6W Duchesne Co., UT

Bill Barrett Corporation (BBC) intends to drill a horizontal through the prospective zone within the Uteland Butte.

## 1 - 3. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals</u>

#### HORIZONTAL LEG FORMATION TOPS

<u>Formation</u>	Depth – MD	Depth - TVD
Green River	1,928'	1,928'
Surface casing	1,500'	1,500'
Mahogany	2,458'	2,458'
TGR3	3,683'	3,683'
Douglas Creek	4,488'	4,488'
3 PT Marker	4,853'	4,853'
Black Shale Facies	5,253'	5,253'
Castle Peak	5,463'	5,462'
*Uteland Butte	5,851'	5,789'
(Penetration Point)		
CR1A Base	6,068'	5,875'
TD	9,312'	5,738'

#### \*PROSPECTIVE PAY

The Uteland Butte CR1 is the primary objective for oil/gas.

Base of Useable Water = 5,500'

#### 4. <u>Casing Program</u>

Hole	SETTING DEPTH				Casing		
<u>Size</u>	(FROM)	(TO)	Size	<b>Weight</b>	<u>Grade</u>	<u>Thread</u>	Condition
12-1/4"	surface	1,500'	9 5/8"	36.0 ppf	J or K 55	ST&C	New
8 3/4"	surface	6,177'	7"	23.0 ppf	P-110	LT&C	New
6 1/8"	surface	9,312'	4 1/2	11.6 ppf	P-110	LT&C	New
			Liner with				
			4-1/2"				
			Tieback				
			for frac				

Drilling Plan LC Tribal 12H-25-46 Duchesne Co., UT

#### 5. <u>Cementing Program</u>

9 5/8" Surface Casing	Lead with approximately 190 sx Halliburton Light Premium
	cement with additives mixed at 11.0 ppg (yield = 3.16
	ft <sup>3</sup> /sx). TOC @ Surface
	Tail with 210 sx Premium 14.8 ppg (yield = $1.36 \text{ ft}^3/\text{sx}$ )
	calculated hole volume with 75% excess. TOC @ 1,000'
	Top out cement, if required: 100 sx of Premium cement with
	additives mixed at 15.8 ppg (yield = 1.17 ft <sup>3</sup> /sk)
7" Intermediate Casing	Lead with approximately 280 sx Tune Light cement with
	additives, mixed at 11.0 ppg (yield = $3.14 \text{ ft}^3/\text{sx}$ ). TOC @
	1,000'
	Tail with approximately 130 sx Halliburton Econocem
	cement with additives mixed at 13.5 ppg (yield = 1.42
	$ft^3/sx$ ). TOC @ 4,405°
4 ½" Liner with 4-1/2" Tieback to	No cement will be used in this section. Swell packers will
surface	be run to isolate the production hole from the intermediate
	casing section.
Note: Top of Tail cement for the in	termediate string will be calculated to 1000' above the KOP

Note: Top of Tail cement for the intermediate string will be calculated to 1000' above the KOP using gauge hole plus 50% excess. Lead to 200' inside of surface casing.

#### 6. <u>Mud Program</u>

<u>Interval</u>	Weight	<b>Viscosity</b>	Fluid Loss	<u>Remarks</u>
			(API filtrate)	
40' – 1,500'	8.4 - 8.8	26 - 36	NC	Freshwater Spud Mud Fluid
				System
1,500' – 6,177'	8.9 - 9.2	26 - 36	NC	Fresh Water with sweeps
6,177' – TD	9.0 - 9.5	45 – 58	4 – 10	Fresh Water PHPA

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

#### 7. BOP and Pressure Containment Data

to operate most efficiently in this manner.

<b>Depth Intervals</b>	BOP Equipment						
0 – 1,500°	No pressure control required						
1,500' – TD	11" 5000# Ram Type BOP						
	1" 5000# Annular BOP						
- Drilling spool to a	accommodate choke and kill lines;						
- Ancillary and cho	ke manifold to be rated @ 5000 psi;						
- Ancillary equipme	ent and choke manifold rated at 5,000#. All BOP and BOPE tests will be in						
accordance with th	ne requirements of onshore Order No. 2;						
- The BLM and the	State of Utah Division of Oil, Gas and Mining will be notified 24 hours in						
advance of all BC	OP pressure tests.						
- BOP hand wheels	may be underneath the sub-structure of the rig if the drilling rig used is set up						

Drilling Plan LC Tribal 12H-25-46 Duchesne Co., UT

#### 8. <u>Auxiliary Equipment</u>

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

#### 9. <u>Testing, Logging and Core Programs</u>

Cores	None anticipated;				
Testing	None anticipated; drill stem tests may be run on shows of interest;				
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;				
Surveys	MWD with GR as needed to land wellbore;				
WL Logging	None in intermediate				
Note: FMI and CAL may be run on the lateral portion of the horizontal wellbore at the geologist's					
discretion.					

#### 10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 2834 psi\* and maximum anticipated surface pressure equals approximately 1572 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

\*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

#### 11. <u>Location and Type of Water Supply</u>

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

#### 12. <u>Drilling Schedule</u>

Location Construction: May 2012 Spud: May 2012

Duration: 25 days drilling time

25 days completion time

<sup>\*\*</sup>Maximum surface pressure = A - (0.22 x TD)

BTR/LC HZ Well Well name: Operator: BBC

String type: Surface

Utah Location:

Design parameters: Minimum design factors: Environment: Collapse Collapse:

H2S considered? No Mud weight: 75 °F 8.900 ppg Design factor 1.125 Surface temperature: 96 °F Design is based on evacuated pipe. Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft Minimum section length: 1,000 ft

Burst: Minimum Drift: 8.750 in Design factor 1.00 Surface Cement top:

Burst

Max anticipated surface

pressure: 527 psi Internal gradient: 0.220 psi/ft Calculated BHP 857 psi

Annular backup: 9.50 ppg Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) Buttress: 1.60 (J) Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 1,302 ft Re subsequent strings:

Non-directional string.

Next setting depth: 4,697 ft Next mud weight: 9.500 ppg Next setting BHP: 2,318 psi Fracture mud wt: 11.000 ppg

Fracture depth: 1,500 ft Injection pressure

857 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
1	1500	9.625	36.00	K-55	ST&C	1500	1500	8.765	106.8
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load (psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (Kips)	Strength (Kips)	Design Factor
1	693	2020	2.913	527	3520	6.68	47	423	9.02 J

Bill Barrett

Date: June 23,2011 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name: BTR/LC HZ Well

Operator: BBC

String type: Intermediate

Location: Utah

Design parameters: Minimum design factors: Environment: Collapse Collapse: H2S considered? No Mud weight: 9.500 ppg Design factor 75 °F 1.125 Surface temperature: 161 °F Design is based on evacuated pipe. Bottom hole temperature: Temperature gradient: 1.40 °F/100ft Minimum section length: 1,500 ft Burst: Minimum Drift: 6.125 in Design factor 1.00 Cement top: 11 ft Burst Max anticipated surface pressure: 1,683 psi Internal gradient: 0.220 psi/ft Tension: Directional Info - Build & Hold Calculated BHP 3,036 psi 8 Round STC: 1.80 (J) Kick-off point 5580 ft 8 Round LTC: 1.80 (J) Departure at shoe: 604 ft Annular backup: 9.50 ppg Buttress: 1.60 (J) Maximum dogleg: 10 °/100ft Premium: 1.50 (J) Inclination at shoe: 93.1° Body yield: Re subsequent strings: 1.50 (B) Next setting depth: 5,980 ft Tension is based on buoyed weight. Next mud weight: 9.500 ppg Neutral point: 5,274 ft Next setting BHP: 2,951 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Capacity
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(ft³)
1	6511	7	23.00	N-80	LT&C	6152	6511	6.25	300.9
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor
1	3036	3575	1.177	1683	6340	3.77	121	442	3.64 J

Bill Barrett

Date: June 23,2011 Denver, Colorado

14.000 ppg

4,474 psi

6,152 ft

Fracture mud wt: Fracture depth:

Injection pressure

#### Remarks:

Collapse is based on a vertical depth of 6152 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

N/A

Operator: String type:

**Production Liner** 

BTR/LC HZ Well

Design parameters:

Collapse

Mud weight: 9.500 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125 Environment:

H2S considered? No Surface temperature: 75 °F 155 °F Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft Minimum section length: 1,000 ft Minimum Drift:

Burst:

Design factor 1.00 3.875 in

Burst

Max anticipated surface

pressure: 1,572 psi Internal gradient: 0.220 psi/ft Calculated BHP 2,837 psi

Annular backup: 9.50 ppg Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: Buttress: 1.60 (J)

Premium: 1.50 (J) 1.60 (B) Body yield:

Tension is based on buoyed weight.

Liner top: 5,000 ft Directional Info - Build & Hold Kick-off point 5123 ft

Departure at shoe: 4885 ft Maximum dogleg: 8 °/100ft Inclination at shoe: 91.26°

Neutral point: 5,703 ft

Run	Segment	F472	Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)
1	5418	4.5	11.60	P-110	LT&C	5748	10418	3.875	26104
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	2837	7580	2.672	205	10690	52.25	7.4	279	37.48 J

Bill Barrett

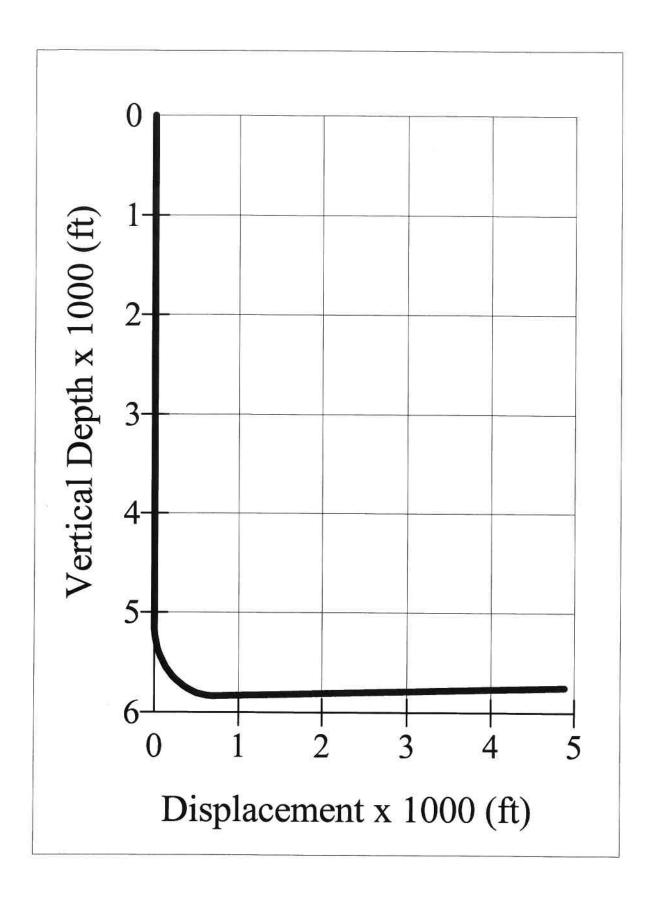
Date: June 23,2011 Denver, Colorado

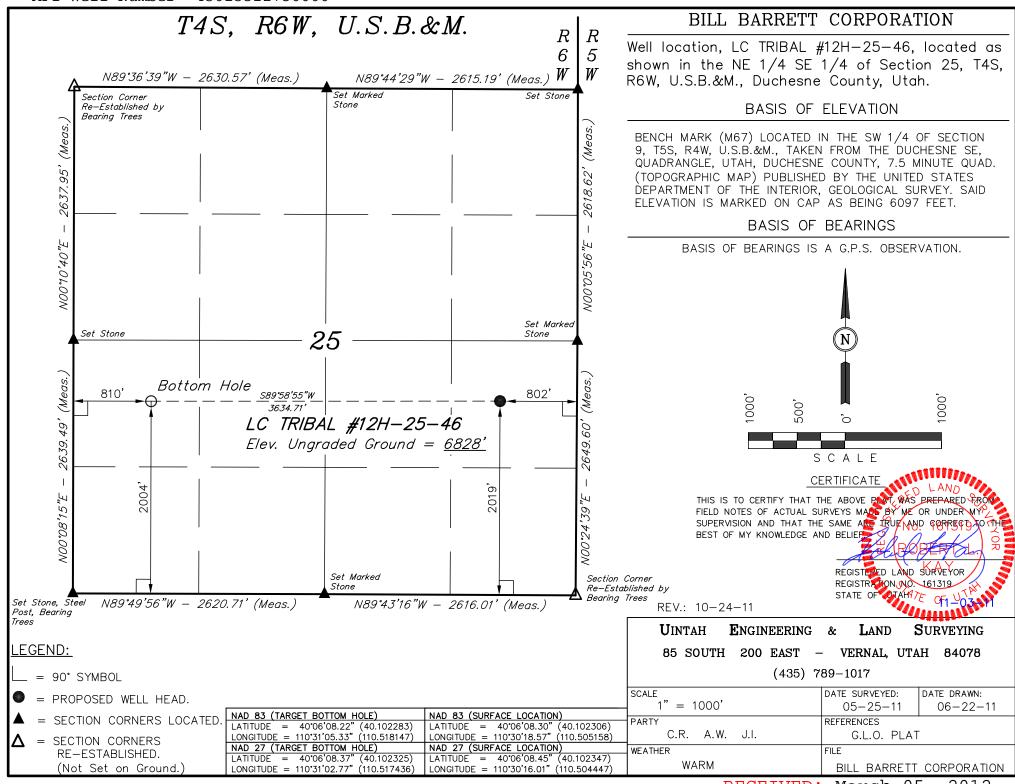
#### Remarks:

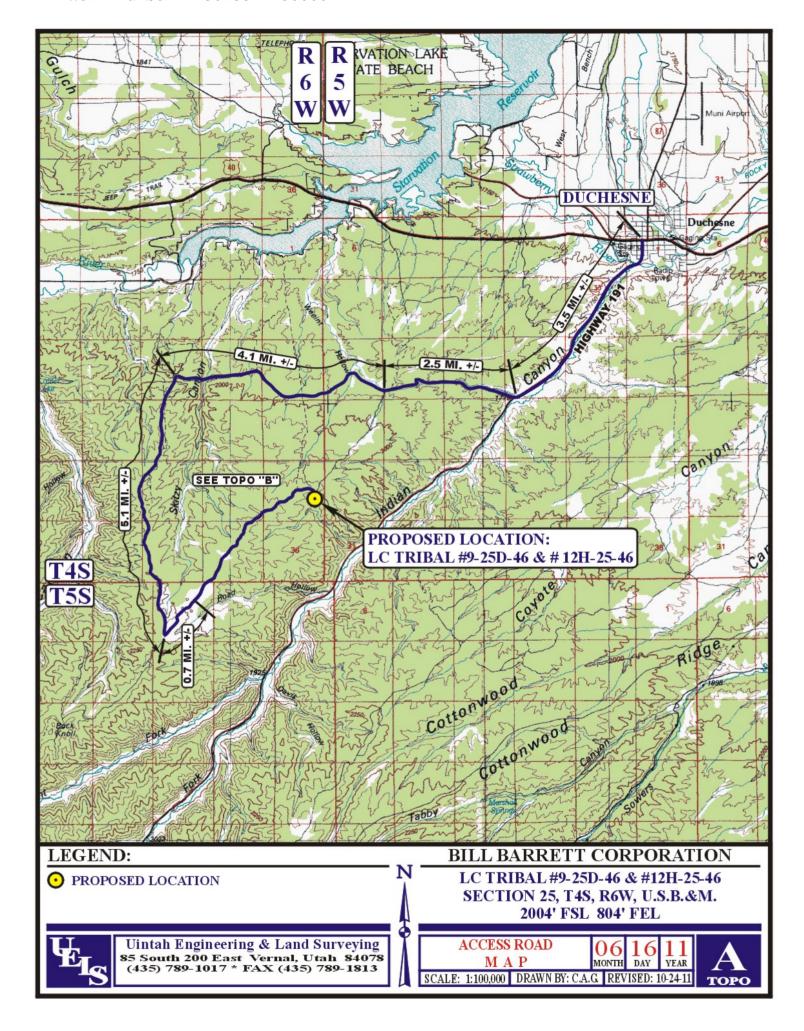
For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 5748 ft, a mud weight of 9.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

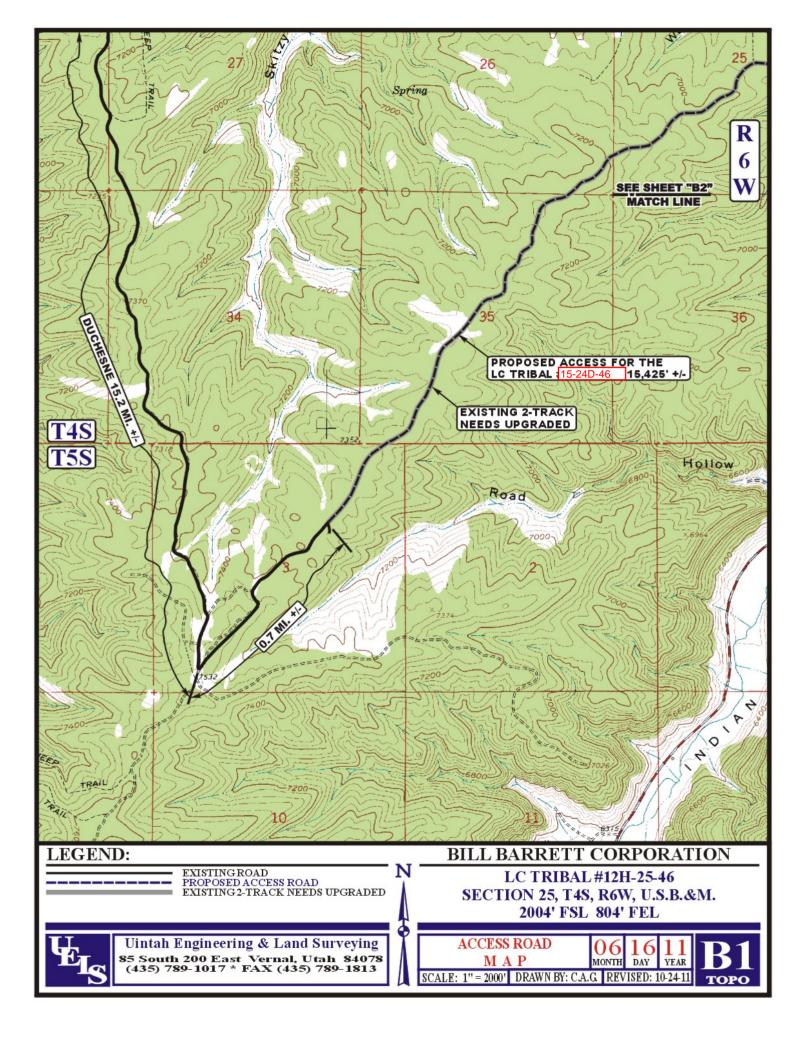
Burst strength is not adjusted for tension.

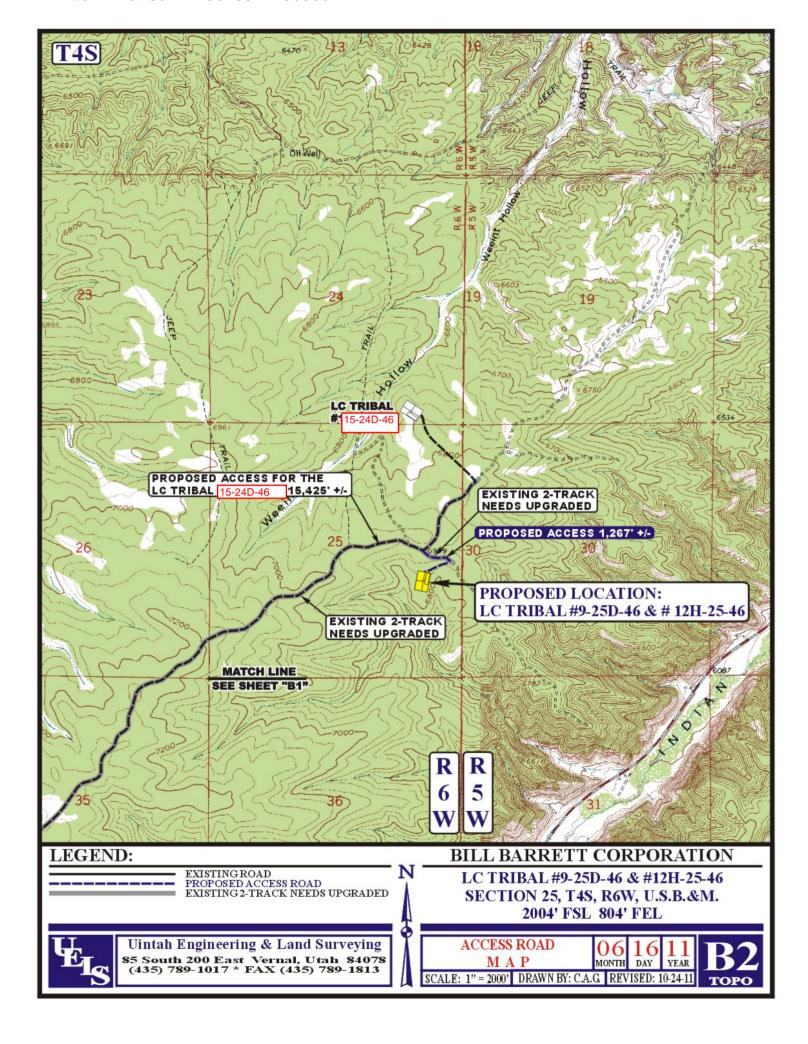
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

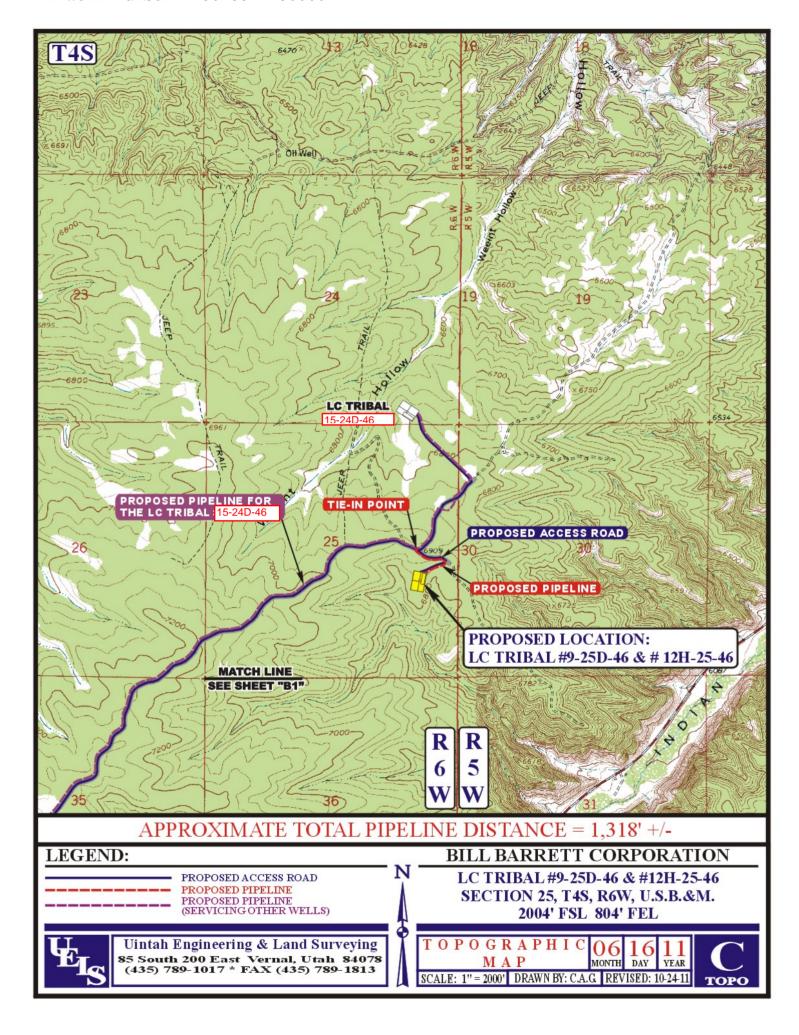












API Well Number: 43013512750000

Bill Barrett Corporation

COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature

Error System: ISCWSA

Scan Method: Closest Approach 3D Error Surface: Elliptical Conic Warning Method: Error Ratio SITE DETAILS: 12H-25-46 LC Tribal

Lake Canyon

Site Centre Latitude: 40° 6' 8.291 N

Longitude: 110° 30′ 16.042 W

Positional Uncertainity: 0.0 Convergence: 0.64 Local North: True

WELLBORE TARGET DETAILS (LAT/LONG)										
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape				
12H-25 PBHL	5738.0	8.3	-3630.9	40° 6' 8.370 N	110° 31' 2.770 W	Rectangle (Sides: L200.0 W200.0)				

2250

1500

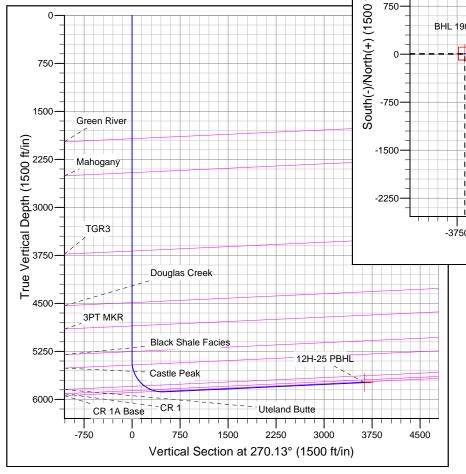
ı														
	SECTION DETAILS													
ſ	Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target			
ı	1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	•			
ı	2	5405.5	0.00	0.00	5405.5	0.0	0.0	0.00	0.00	0.0				
ı	3	6177.5	92.64	270.13	5882.5	1.1	-499.5	12.00	270.13	499.5				
ı	4	9312.2	92.64	270.13	5738.0	8.3	-3630.9	0.00	0.00	3630.9				
ı	5	9312.2	0.00	0.00	5738.0	8.3	-3630.9	0.00	180.00	3630.9	12H-25 PBHL			

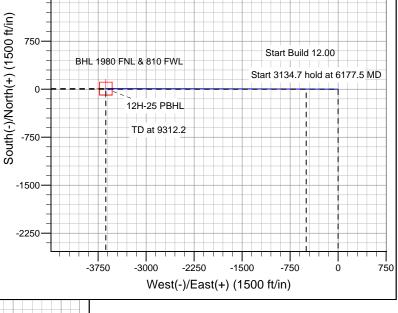
FORMATION TOP DETAILS TVDPath MDPath Formation 1928.0 1928.0 Green River 2458.0 2458.0 Mahogany 3683.0 3683.0 TGR3 4488.0 4488.0 Douglas Creek 4853.0 4853.0 3PT MKR 5253.0 5253.0 **Black Shale Facies** 5462.8 5463.0 Castle Peak 5789.1 5851.0 **Uteland Butte** CR 1

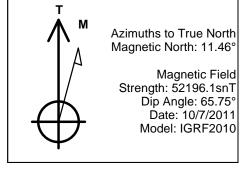
5849.1 5974.7 CR 1 5875.0 6068.1 CR 1A Base

#### CASING DETAILS

No casing data is available







## **BILL BARRETT CORP**

DUCHESNE COUNTY, UT (NAD 27) 12H-25-46 LC Tribal 12H-25-46 LC Tribal

12H-25-46 LC Tribal

Plan: Design #1

## **Standard Planning Report**

07 October, 2011

#### **Bill Barrett Corp**

Planning Report

Compass Database:

Company: **BILL BARRETT CORP** 

Project: DUCHESNE COUNTY, UT (NAD 27)

12H-25-46 LC Tribal Site: Well: 12H-25-46 LC Tribal Wellbore: 12H-25-46 LC Tribal

Design #1 Design:

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well 12H-25-46 LC Tribal

KB @ 6843.0ft (Original Well Elev) KB @ 6843.0ft (Original Well Elev)

True

Minimum Curvature

Project DUCHESNE COUNTY, UT (NAD 27)

US State Plane 1927 (Exact solution) Map System: NAD 1927 (NADCON CONUS) Geo Datum:

Utah Central 4302 Map Zone:

System Datum: Ground Level

12H-25-46 LC Tribal Site

Northing: 645,858.77 ft Site Position: Latitude: 40° 6' 8.291 N From: Lat/Long Easting: 2,278,474.36 ft Longitude: 110° 30' 16.042 W **Position Uncertainty:** 0.0 ft Slot Radius: **Grid Convergence:** 0.64 °

Well 12H-25-46 LC Tribal, NE 1/4, SE 1/4, Sect 25, T4S, R6W **Well Position** +N/-S 0.0 ft 645,858.76 ft Latitude: 40° 6' 8.291 N Northing: +E/-W 0.0 ft Easting: 2,278,474.36 ft Longitude: 110° 30' 16.042 W **Position Uncertainty** 0.0 ft Wellhead Elevation: ft **Ground Level:** 6,828.0 ft

Wellbore 12H-25-46 LC Tribal Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (nT) (°) (°) IGRF2010 10/7/2011 11.46 65.75 52,196

Design #1 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.0 0.0 0.0 270.13

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,405.5	0.00	0.00	5,405.5	0.0	0.0	0.00	0.00	0.00	0.00	
6,177.5	92.64	270.13	5,882.5	1.1	-499.5	12.00	12.00	0.00	270.13	
9,312.2	92.64	270.13	5,738.0	8.3	-3,630.9	0.00	0.00	0.00	0.00	
9,312.2	0.00	0.00	5,738.0	8.3	-3,630.9	0.00	0.00	0.00	180.00	12H-25 PBHL

#### **Bill Barrett Corp**

Planning Report

Database: Compass

Company: BILL BARRETT CORP

 Project:
 DUCHESNE COUNTY, UT (NAD 27)

 Site:
 12H-25-46 LC Tribal

 Well:
 12H-25-46 LC Tribal

 Wellbore:
 12H-25-46 LC Tribal

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 12H-25-46 LC Tribal

KB @ 6843.0ft (Original Well Elev) KB @ 6843.0ft (Original Well Elev)

True

Minimum Curvature

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4 500 0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0							0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,928.0	0.00	0.00	1,928.0	0.0	0.0	0.0	0.00	0.00	0.00
Green River									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
,			,						
2,458.0	0.00	0.00	2,458.0	0.0	0.0	0.0	0.00	0.00	0.00
Mahogany									
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
,									
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,683.0	0.00	0.00	3,683.0	0.0	0.0	0.0	0.00	0.00	0.00
TGR3									
1 5110									
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
			,						
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,488.0	0.00	0.00	4,488.0	0.0	0.0	0.0	0.00	0.00	0.00
Douglas Cree	ek .								

#### **Bill Barrett Corp**

**Planning Report** 

Database: Compass

Company: **BILL BARRETT CORP** 

Project: DUCHESNE COUNTY, UT (NAD 27) 12H-25-46 LC Tribal Site: Well: 12H-25-46 LC Tribal Wellbore: 12H-25-46 LC Tribal

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well 12H-25-46 LC Tribal

KB @ 6843.0ft (Original Well Elev) KB @ 6843.0ft (Original Well Elev)

True

Minimum Curvature

(ft)  4,600.0 4,700.0 4,800.0 4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Vertical Depth (ft)  4,600.0 4,700.0 4,800.0 4,853.0  4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  5,300.0 5,400.0 5,405.5 5,462.8  5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	+N/-S (ft)  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	+E/-W (ft)  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Vertical Section (ft)  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Dogleg Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Build Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Turn Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0
Depth (fft)  4,600.0 4,700.0 4,800.0 4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Depth (ft)  4,600.0 4,700.0 4,800.0 4,853.0  4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  5,300.0 5,405.5 5,462.8  5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Rate (°/100ft)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0
4,700.0 4,800.0 4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	4,700.0 4,800.0 4,853.0 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
4,700.0 4,800.0 4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	4,700.0 4,800.0 4,853.0 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
4,800.0 4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	4,800.0 4,853.0 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
4,853.0  3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  6.90  11.34  23.34  35.34  47.34  53.46	0.00  0.00 0.00 0.00 0.00 0.00 0.00 0.	4,853.0 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00  0.00  0.00  0.00  0.00  0.00  0.00  12.00  12.00  12.00  12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
3PT MKR 4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 Black Shale Faci 5,300.0 5,405.5 5,463.0 Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13	4,900.0 5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
4,900.0 5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,800.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,000.0 5,100.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,000.0 5,100.0 5,200.0 5,253.0 5,300.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,100.0 5,200.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,800.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 ies 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13	5,100.0 5,200.0 5,253.0 5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4	0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,100.0 5,200.0 5,200.0 5,253.0  Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,800.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 ies 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13	5,100.0 5,200.0 5,253.0 5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4	0.0 0.0 0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,200.0 5,253.0  Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,800.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 ies 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13	5,200.0 5,253.0 5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4 0.4	0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,253.0  Black Shale Faci 5,300.0  5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,800.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1  6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 ies 0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,253.0 5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4 0.4	0.0 0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Black Shale Faci 5,300.0 5,400.0 5,405.5 5,463.0 Castle Peak 5,500.0 5,600.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,300.0 5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4 0.4	0.0 0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,300.0 5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.1 0.2 0.4 0.4	0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,400.0 5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,400.0 5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.0 0.1 0.2 0.4 0.4	0.0 0.0 -3.5 -9.3 -39.1 -88.0 -153.9 -193.2	0.0 0.0 3.5 9.3 39.1 88.0 153.9	0.00 0.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	0.00 6.90 11.34 23.34 35.34 47.34 53.46	0.00 270.13 270.13 270.13 270.13 270.13 270.13	5,405.5 5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.1 0.2 0.4 0.4	-9.3 -39.1 -88.0 -153.9 -193.2	9.3 39.1 88.0 153.9	0.00 12.00 12.00 12.00 12.00 12.00	0.00 12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00
5,405.5 5,463.0  Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	11.34 23.34 35.34 47.34 53.46	270.13 270.13 270.13 270.13 270.13 270.13	5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.0 0.1 0.2 0.4 0.4	-3.5 -9.3 -39.1 -88.0 -153.9 -193.2	9.3 39.1 88.0 153.9	12.00 12.00 12.00 12.00 12.00	12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00 0.00
Castle Peak 5,500.0 5,600.0 5,700.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	11.34 23.34 35.34 47.34 53.46	270.13 270.13 270.13 270.13 270.13 270.13	5,462.8 5,499.4 5,594.7 5,681.7 5,756.6 5,789.1	0.0 0.1 0.2 0.4 0.4	-3.5 -9.3 -39.1 -88.0 -153.9 -193.2	9.3 39.1 88.0 153.9	12.00 12.00 12.00 12.00	12.00 12.00 12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00 0.00
5,500.0 5,600.0 5,700.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	23.34 35.34 47.34 53.46	270.13 270.13 270.13 270.13	5,594.7 5,681.7 5,756.6 5,789.1	0.1 0.2 0.4 0.4	-39.1 -88.0 -153.9 -193.2	39.1 88.0 153.9	12.00 12.00 12.00	12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00
5,500.0 5,600.0 5,700.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	23.34 35.34 47.34 53.46	270.13 270.13 270.13 270.13	5,594.7 5,681.7 5,756.6 5,789.1	0.1 0.2 0.4 0.4	-39.1 -88.0 -153.9 -193.2	39.1 88.0 153.9	12.00 12.00 12.00	12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00
5,600.0 5,700.0 5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	23.34 35.34 47.34 53.46	270.13 270.13 270.13 270.13	5,594.7 5,681.7 5,756.6 5,789.1	0.1 0.2 0.4 0.4	-39.1 -88.0 -153.9 -193.2	39.1 88.0 153.9	12.00 12.00 12.00	12.00 12.00 12.00 12.00	0.00 0.00 0.00 0.00
5,700.0 5,800.0 5,851.0 <b>Uteland Butte</b> 5,900.0 5,974.7 <b>CR 1</b> 6,000.0 6,068.1 <b>CR 1A Base</b> 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	35.34 47.34 53.46	270.13 270.13 270.13	5,681.7 5,756.6 5,789.1	0.2 0.4 0.4	-88.0 -153.9 -193.2	88.0 153.9	12.00 12.00	12.00 12.00 12.00	0.00 0.00 0.00
5,800.0 5,851.0 Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	47.34 53.46 59.34	270.13 270.13 270.13	5,756.6 5,789.1	0.4 0.4	-153.9 -193.2	153.9	12.00	12.00 12.00	0.00 0.00
5,851.0  Uteland Butte 5,900.0 5,974.7  CR 1 6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	53.46 59.34	270.13 270.13	5,789.1	0.4	-193.2			12.00	0.00
Uteland Butte 5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	59.34	270.13				193.2	12.00		
5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0			5,816.2	0.5	224.0			10.00	0.00
5,900.0 5,974.7 CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0			5,816.2	0.5	224.0			40.00	0.00
5,974.7  CR 1  6,000.0 6,068.1  CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0					-234.0	234.0	12.00	12.00	
CR 1 6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	00.00	270.13	5,849.1	0.7	-300.9	300.9	12.00	12.00	0.00
6,000.0 6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0		2.00	0,0.0	· · ·	000.0	000.0	.2.00	.2.00	0.00
6,068.1 CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0									
CR 1A Base 6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	71.34	270.13	5,857.9	0.7	-324.7	324.7	12.00	12.00	0.00
6,100.0 6,177.5 6,200.0 6,300.0 6,400.0	79.51	270.13	5,875.0	0.9	-390.6	390.6	12.00	12.00	0.00
6,177.5 6,200.0 6,300.0 6,400.0									
6,177.5 6,200.0 6,300.0 6,400.0	83.34	270.13	5,879.7	1.0	-422.1	422.1	12.00	12.00	0.00
6,200.0 6,300.0 6,400.0	92.64	270.13	5,882.5	1.1	-499.5	499.5	12.00	12.00	0.00
6,300.0 6,400.0	92.64	270.13	5,881.4	1.2	-521.9	521.9	0.00	0.00	0.00
6,400.0									
	92.64	270.13	5,876.8	1.4	-621.8	621.8	0.00	0.00	0.00
0.500.0	92.64	270.13	5,872.2	1.6	-721.7	721.7	0.00	0.00	0.00
6,500.0	92.64	270.13	5,867.6	1.9	-821.6	821.6	0.00	0.00	0.00
6,600.0	92.64	270.13	5,863.0	2.1	-921.5	921.5	0.00	0.00	0.00
6,700.0	92.64	270.13	5,858.4	2.3	-1,021.4	1,021.4	0.00	0.00	0.00
6,800.0	92.64	270.13	5,853.8	2.6	-1,121.3	1,121.3	0.00	0.00	0.00
			,						
6,900.0	92.64	270.13	5,849.2	2.8	-1,221.2	1,221.2	0.00	0.00	0.00
7,000.0	92.64	270.13	5,844.6	3.0	-1,321.1	1,321.1	0.00	0.00	0.00
7,100.0	92.64	270.13	5,839.9	3.2	-1,421.0	1,421.0	0.00	0.00	0.00
7,200.0	92.64	270.13	5,835.3	3.5	-1,520.9	1,520.9	0.00	0.00	0.00
7,300.0	92.64	270.13	5,830.7	3.7	-1,620.8	1,620.8	0.00	0.00	0.00
7,400.0	92.64	270.13	5,826.1	3.9	-1,720.7	1,720.7	0.00	0.00	0.00
7,500.0	92.64	270.13	5,821.5	4.2	-1,820.5	1,820.6	0.00	0.00	0.00
7,600.0	92.64	270.13	5,816.9	4.4	-1,920.4	1,920.4	0.00	0.00	0.00
7,700.0	92.64	270.13	5,812.3	4.6	-2,020.3	2,020.3	0.00	0.00	0.00
7,800.0	92.64	270.13	5,807.7	4.8	-2,120.2	2,120.2	0.00	0.00	0.00
7,900.0	92.64	270.13	5,803.1	5.1	-2,220.1	2,220.1	0.00	0.00	0.00
8,000.0	0.0 6.4	270.13	5,798.5	5.3	-2,320.0	2,320.0	0.00	0.00	0.00
8,100.0	92.64	270.13	5,793.9	5.5	-2,419.9	2,419.9	0.00	0.00	0.00
8,200.0	92.64		5,789.3	5.8	-2,519.8	2,519.8	0.00	0.00	0.00
8,300.0		270.13			-2,619.7	2,619.7	0.00	0.00	0.00
8,400.0	92.64		5,784.6	6.0		Z,U 13.1	0.00	0.00	0.00

DUCHESNE COUNTY, UT (NAD 27)

#### **Bill Barrett Corp**

Planning Report

Database: Compass

Project:

Company: BILL BARRETT CORP

 Site:
 12H-25-46 LC Tribal

 Well:
 12H-25-46 LC Tribal

 Wellbore:
 12H-25-46 LC Tribal

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 12H-25-46 LC Tribal

KB @ 6843.0ft (Original Well Elev) KB @ 6843.0ft (Original Well Elev)

True

Minimum Curvature

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,500.0	92.64	270.13	5,775.4	6.4	-2,819.5	2,819.5	0.00	0.00	0.00
8,600.0	92.64	270.13	5,770.8	6.7	-2,919.4	2,919.4	0.00	0.00	0.00
8,700.0	92.64	270.13	5,766.2	6.9	-3,019.3	3,019.3	0.00	0.00	0.00
8,800.0	92.64	270.13	5,761.6	7.1	-3,119.2	3,119.2	0.00	0.00	0.00
8,900.0	92.64	270.13	5,757.0	7.3	-3,219.1	3,219.1	0.00	0.00	0.00
9,000.0	92.64	270.13	5,752.4	7.6	-3,318.9	3,319.0	0.00	0.00	0.00
9,100.0	92.64	270.13	5,747.8	7.8	-3,418.8	3,418.9	0.00	0.00	0.00
9,200.0	92.64	270.13	5,743.2	8.0	-3,518.7	3,518.7	0.00	0.00	0.00
9,300.0	92.64	270.13	5,738.6	8.3	-3,618.6	3,618.6	0.00	0.00	0.00
9,312.2	0.00	0.00	5,738.0	8.3	-3,630.9	3,630.9	756.80	-756.80	0.00
12H-25 PBHI	_								

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,928.0	1,928.0	Green River		-2.64	270.13	
	2,458.0	2,458.0	Mahogany		-2.64	270.13	
	3,683.0	3,683.0	TGR3		-2.64	270.13	
	4,488.0	4,488.0	Douglas Creek		-2.64	270.13	
	4,853.0	4,853.0	3PT MKR		-2.64	270.13	
	5,253.0	5,253.0	Black Shale Facies		-2.64	270.13	
	5,463.0	5,463.0	Castle Peak		-2.64	270.13	
	5,851.0	5,798.0	Uteland Butte		-2.64	270.13	
	5,974.7	5,863.0	CR 1		-2.64	270.13	
	6,068.1	5,893.0	CR 1A Base		-2.64	270.13	

#### **SURFACE USE PLAN**

# BILL BARRETT CORPORATION <u>LC Tribal 9-25D-46 & LC Tribal 12H-25-46 Well Pad</u> Duchesne County, Utah

#### LC Tribal 9-25D-46

NE SE, 2004' FSL and 804' FEL, Sec. 25, T4S-R6W (surface hole) SE SE, 980' FSL and 810' FEL, Sec. 25, T4S-R6W (bottom hole)

#### LC Tribal 12H-25-46

NE SE, 2019' FSL and 802' FEL, Sec. 25, T4S-R6W (surface hole) NW SW, 2004' FSL and 810' FWL, Sec. 25, T4S-R6W (bottom hole)

The onsite inspection for this pad occurred on October 14, 2011. This is a new pad with a total of two proposed wells. Plat changes requested at the onsite are reflected within this APD and summarized below.

- a) Split topsoil between corners 2 & 3 and 3 & 4;
- b) Restrict topsoil stockpiles to the north edge of the pad; keep topsoil between the proposed access road and pad corner #2 and between corners #3 & #4

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

#### 1. <u>Existing Roads:</u>

- a. The proposed well pad is located approximately 19.0 miles southwest of Duchesne, Utah. Maps and directions reflecting the route to the proposed well pad are included (see Topographic maps A and B).
- b. The existing State Highway 191 would be utilized from Duchesne for 3.5 miles to the existing BBC maintained Skitzy Road that would be utilized for 6.6 miles and provides access to the existing 7-3-56 DLB access road that would be utilized for 5.8 miles and provides access to the planned new access road.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Duchesne County Road Department maintenance are necessary to access the project area with no improvements proposed. No encroachment or pipeline crossing permits are required.

Bill Barrett Corporation Surface Use Plan LC Tribal 9-25D-46 & LC Tribal 12H-25-46 Pad Duchesne County, UT

f. All existing roads would be maintained and kept in good repair during all phases of operation.

#### 2. Planned Access Road:

- a. Approximately 1,267 feet of new access road trending southeast then southwest is planned from the proposed LC Tribal 15H-24-46 access road. The LC Tribal 15H-24-46 has been applied for and continues an additional 15,425 feet to the existing 7-3-56 DLB access road (see Topographic Map B). The proposed access road crosses entirely Ute Tribe surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the pad.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

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- i. No culverts or low-water crossings are anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.
- j. No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- All access roads and surface disturbing activities would conform to the appropriate standard, **no higher than necessary**, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: <u>Surface Operating Standards for Oil and Gas Exploration</u> and Development, Fourth Edition – Revised 2007.
- m. The operator would be responsible for all maintenance needs of the new access road.

#### 3. Location of Existing Wells (see One-Mile Radius Map):

a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:

i.	water wells	none
ii.	injection wells	none
iii.	disposal wells	none
iv.	drilling wells	none
v.	temp shut-in wells	none
vi.	producing wells	none
vii.	abandoned wells	one

#### 4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 glycol tank, (3) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 500 bbl test tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal

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combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 1,318 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending northwest to the proposed LC Tribal 15H-24-46 pipeline corridor. The LC Tribal 15H-24-46 pipeline corridor has been applied for and continues 15,425 feet to the existing pipeline corridor for the 7-3-56 DLB. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely Ute Tribe surface.
- g. The new segment of gas pipeline would be surface laid within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Construction of the ROW would temporarily utilize the 30 foot disturbed width for the road for a total disturbed width of 60 foot for the road and pipeline corridors. The use of the proposed well pad and access roads would facilitate the staging of the pipeline construction.
- i. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the reestablishment of the native plant community.
- j. All permanent above-ground structures would be painted a flat, non-reflective Beetle Green color, to match the standard environmental colors. All facilities

Bill Barrett Corporation Surface Use Plan LC Tribal 9-25D-46 & LC Tribal 12H-25-46 Pad Duchesne County, UT

would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- k. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.
- 1. The pad would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

#### 5. <u>Location and Type of Water Supply:</u>

a. Water for the drilling and completion would be trucked from any of the following locations:

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-180	Duchesne City	5 cfs	8/13/2004	Knight	Duchesne
	Water Service			Diversion Dam	River
	District				
43-1202, Change a13837	Myton City	5.49 cfr and	3/21/1986	Knight	Duchesne
		3967 acre feet		Diversion Dam	River
43-10444, Appln A57477	Duchesne	2 cfs	1994	Ditch at	Cow Canyon
	County Upper			Source	Spring
	Country Water				
43-10446, Appln F57432	Duchesne	1.58 cfs	1994	Ditch at	Cow Canyon
	County Upper			Source	Spring
	Country Water				
43-1273, Appln A17462	J.J.N.P.	7 cfs	1946	Strawberry	Strawberry
	Company			River	River
43-1273, Appln t36590	J.J.N.P.	4 cfs	6/03/2010	Strawberry	Strawberry
	Company			River	River
43-2505, Appln t37379	McKinnon	1.3 cfs	4/28/2011	Pumped from	Water Canyon
	Ranch			Sec, 17,	Lake
	Properties, LC			T4SR6W	
43-12415, Change A17215a	Peatross	1.89 cfs	09/2011	Dugout Pond	Strawberry
	Ranch, LLC				River

- b. No new water well is proposed with this application.
- c. Should additional water sources be pursued they would be properly permitted through the State of Utah Division of Water Rights.

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d. Water use would vary in accordance with the formations to be drilled but would be up to approximately 5.41 acre feet for drilling and completion operations for each well.

#### 6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

#### 7. <u>Methods of Handling Waste Disposal:</u>

- a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.
- b. The reserve pit would be constructed so as not to leak, break or allow any discharge.
- c. The reserve would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit. A minimum of two feet of free board would be maintained between the maximum fluid level and the top of the reserve pit at all times.
- d. To deter livestock from entering the pit, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.
- e. Drill cuttings would be contained in the pit and buried on-site for a period not to exceed six months, weather permitting
- f. Produced fluids from the wells other than water would be decanted into steel test tank(s) until such time as construction of production facilities is completed. Any oil that may be accumulated would be transferred to a permanent production tank. Produced water may be used in further drilling and completion activities, evaporated in the pit, or would be hauled to one of the state-approved disposal facilities below:

#### **Disposal Facilities**

- 1. RNI Industries, Inc. Pleasant Valley Disposal Pits, Sec. 25, 26, 35 & 36, T4S-R3W
- 2. Pro Water LLC Blue Bench 13-1 Disposal Well (43-013-30971)

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#### **Disposal Facilities**

NENE, Sec. 13, T3S-R5W

- 3. RN Industries, Inc. Bluebell Disposal Ponds, Sec. 2, 4 & 9, T2S-R2W
- 4. Water Disposal, Inc. Harmston 1-32-A1 Disposal Well (43-013-30224), UTR #00707, Sec. 32, T1S-R1W
- 5. Unified Water Pits Sec. 31, T2S-R4W
- 6. Iowa Tank Line Pits 8500 BLM Fence Road, Pleasant Valley
- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.

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- 1. A flare pit may be constructed a minimum of 110 feet from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.
- m. Hydrocarbons would be removed from the reserve pit would as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

#### 8. Ancillary Facilities:

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A powerline corridor is not proposed at this time but may be applied for in the future.

#### 9. Well Pad Layout:

- a. Each well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 384 feet x 265 feet with an inboard reserve pit size of 235 feet x 70 feet x 8 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.

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- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.
- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well pad to prevent surface waters from entering the well pad area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.
- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

#### 10. Plan for Restoration of the Surface:

- a. A site specific reclamation plan would be submitted, if requested, within 90 days of location construction to the surface managing agency.
- b. Pad reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.
- c. The operator would control noxious weeds along access road use authorizations and well pad by spraying or mechanical removal, according to the Utah Noxious Weed Act and as set forth in the approved surface damage agreements.
- d. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The reserve pit would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the reserve pit until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.
- e. The reserve pit and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable

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stabilization. Back slopes and fore slopes would be reduced as practical and scarified with the contour. The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the Ute Tribe specified seed mix.

f. Topsoil salvaged from the drill pad and stored for more than one year would be placed at the location indicated on the well pad layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the Ute Tribe prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

#### 11. <u>Surface and Mineral Ownership:</u>

a. Surface & Mineral Ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.

#### 12. Other Information:

- b. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies as MOAC Report No. 11-247 (U-11-MQ-0740i,p,s) dated September 29, 2011.
- a. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- b. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator
    active locations or in specifically designated smoking areas. All cigarette
    butts would be placed in appropriate containers and not thrown on the
    ground or out windows of vehicles; personnel and contractors would abide
    by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.

#### c. Disturbance estimates:

#### **Approximate Acreage Disturbances**

Well Pad		3.048	acres
Access	1267 feet	0.832	acres
Pipeline	1318 feet	0.855	acres

Total 4.735 acres

Bill Barrett Corporation Surface Use Plan LC Tribal 9-25D-46 & LC Tribal 12H-25-46 Pad Duchesne County, UT

Bill Barrett Corporation
Surface Use Plan
LC Tribal 9-25D-46 & LC Tribal 12H-25-46 Pad
Duchesne County, UT

#### **OPERATOR CERTIFICATION**

#### Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under Bill Barrett Corporations federal nationwide bond. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this

5th day of March

2012

Name:

Venessa Langmacher

Position Title:

Senior Permit Analyst

Address:

1099 18th Street, Suite 2300, Denver, CO 80202

Telephone:

303-312-8172

E-mail:

vlangmacher@billbarrettcorp.com

Field Representative

Kary Eldredge / Bill Barrett Corporation

Address:

1820 W. Highway 40, Roosevelt, UT 84066

Telephone:

435-725-3515 (office); 435-724-6789 (mobile)

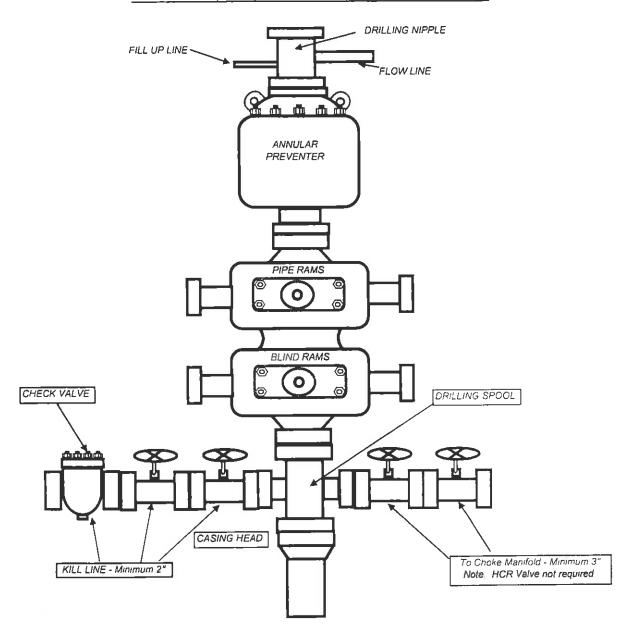
E-mail:

keldredge@billbarrettcorp.com

Venessa Langmacher, Senior Permit Analyst

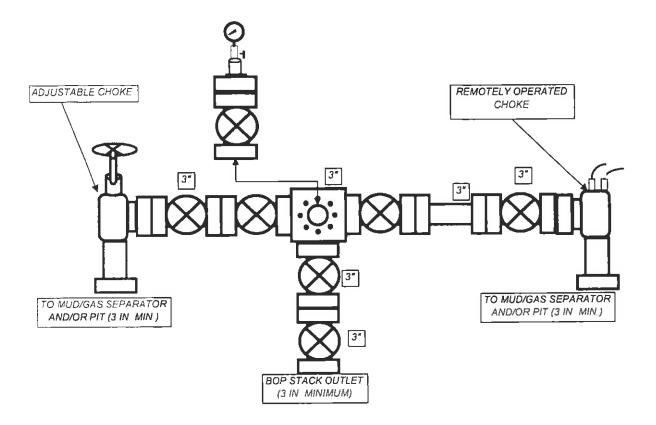
## **BILL BARRETT CORPORATION**

#### TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



## **BILL BARRETT CORPORATION**

TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





March 5, 2012

Ms. Diana Mason, Petroleum Technician State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Horizontal Drilling

LC Tribal # 12H-25-46

Section 25, T4S-R6W, U.S.B.&M.

**Duchesne County, Utah** 

Surface Hole Location: 2,019' FSL & 802' FEL, NESE, 25-T4S-R6W, USB&M Bottom Hole Location: 2,004' FSL & 810' FWL, NWSW, 25-T4S-R6W, USB&M

Dear Ms. Mason:

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill ("APD") regarding the above-referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-2 pertaining to a temporary 640 acre spacing unit for a horizontal well.

- Tribal Exploration and Development Agreement #14-20-H62-5500, which includes all
  of the subject Section 25 and other lands, allows for the drilling of the #12H-25-46 well.
- Once the well has been drilled and completed BBC will earn the tribal lease covering 640 "deep depth" acres being further described in the Exploration and Development Agreement.
- The LC Tribal #12H-25-46 will be perforated no less than 640 feet from the Section 25 Tribal Lease boundary, in accordance with R649-3-2(3).

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-2. If you should have any questions or need further information, please contact me at 303-312-8544.

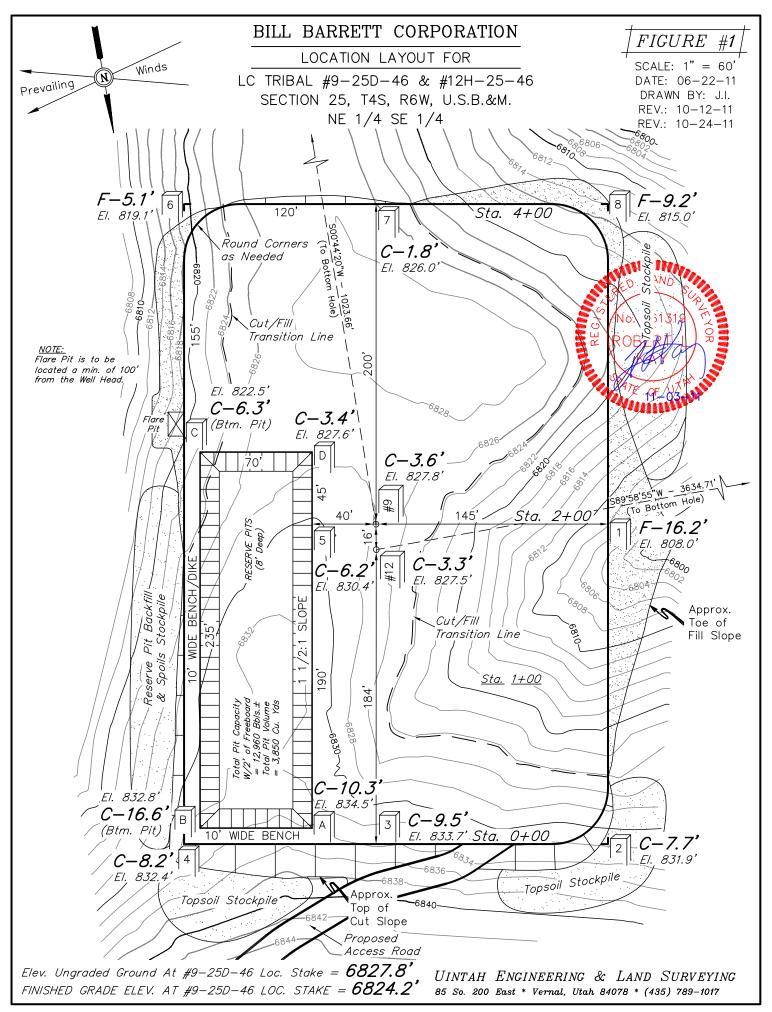
Sincerely,

**BILL BARRETT CORPORATION** 

neura Sangmacker

David Watts Landman

> 1099 18<sup>TH</sup> STREET SUITE 2300 DENVER, CO 80202 P 303.293.9100 F 303.291.0420

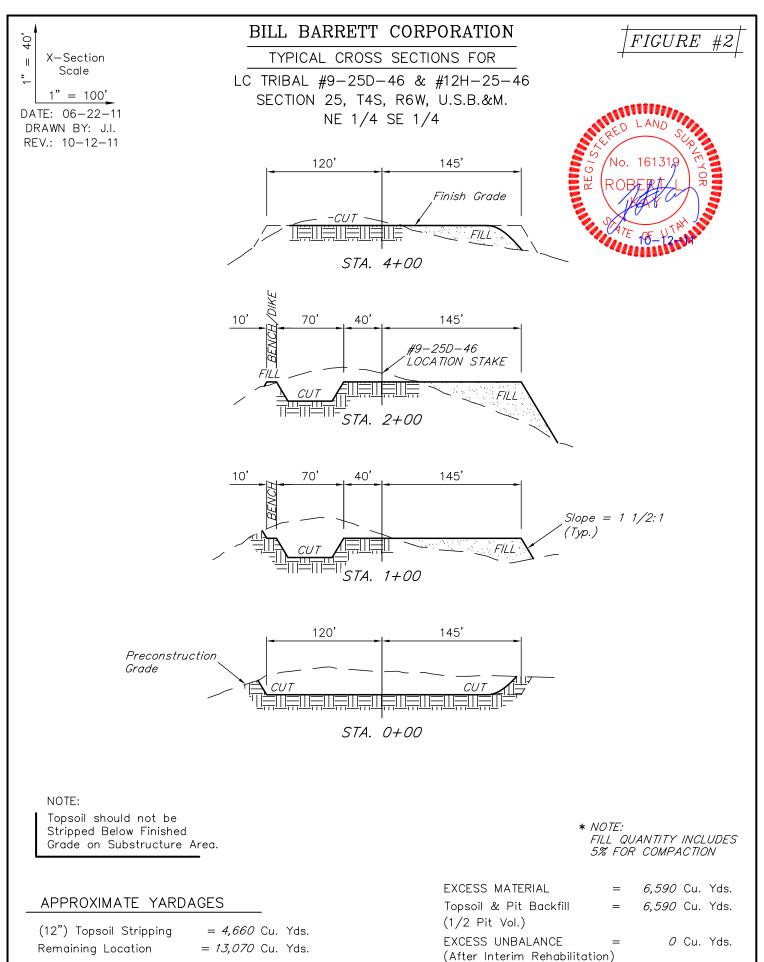


TOTAL CUT

**FILL** 

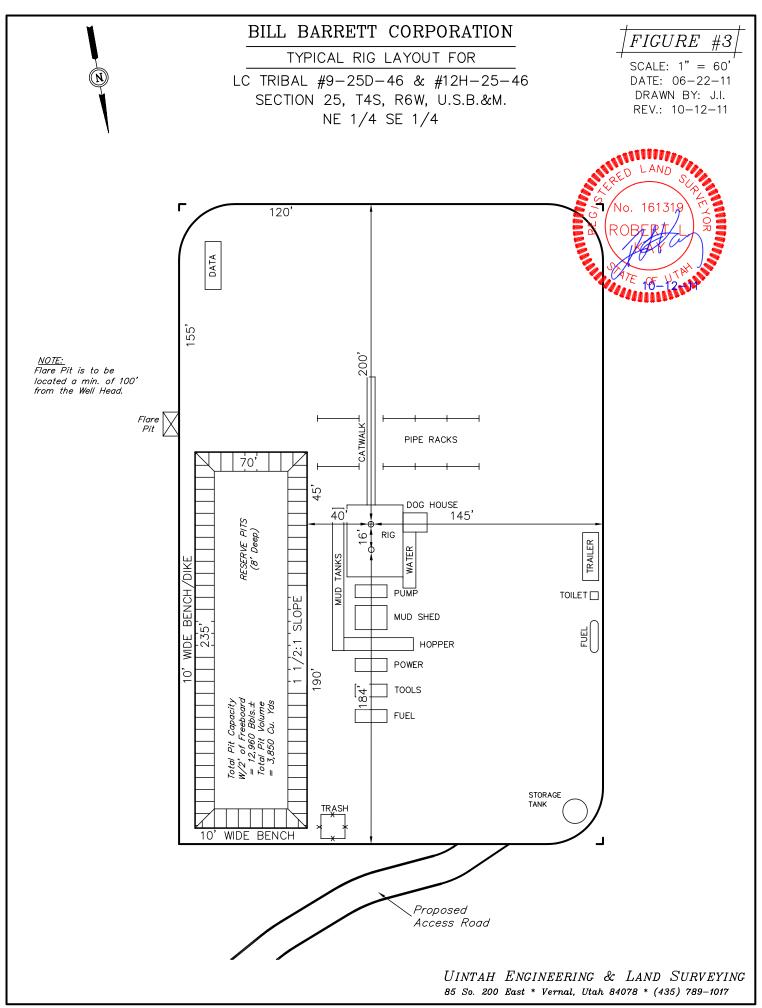
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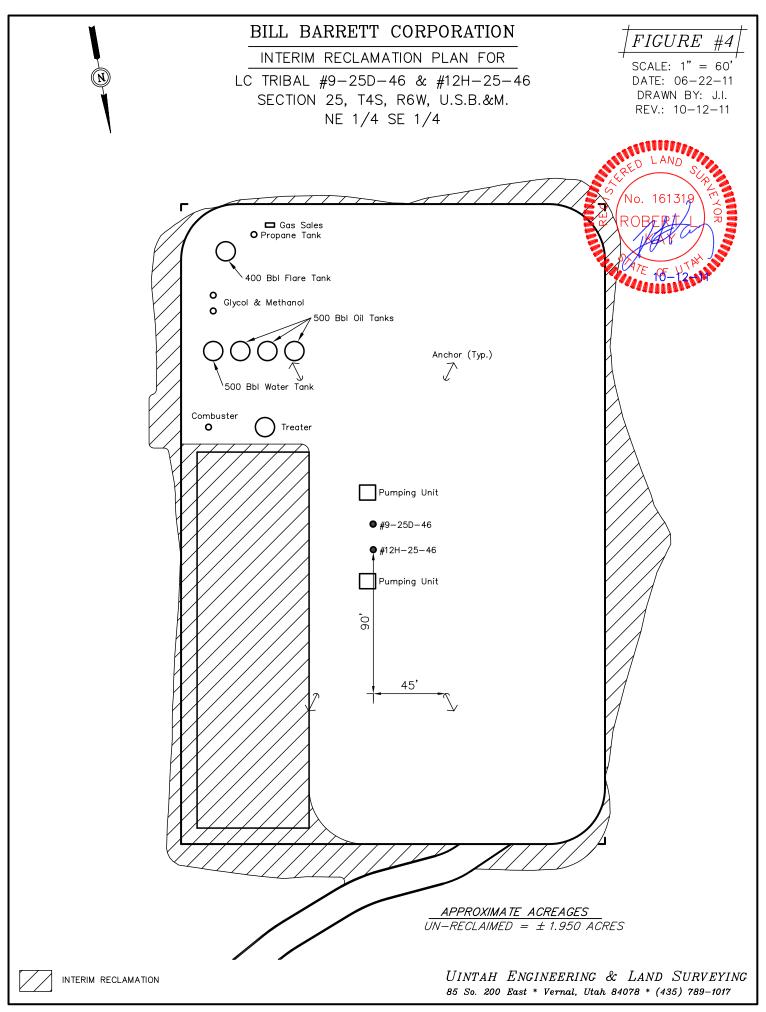
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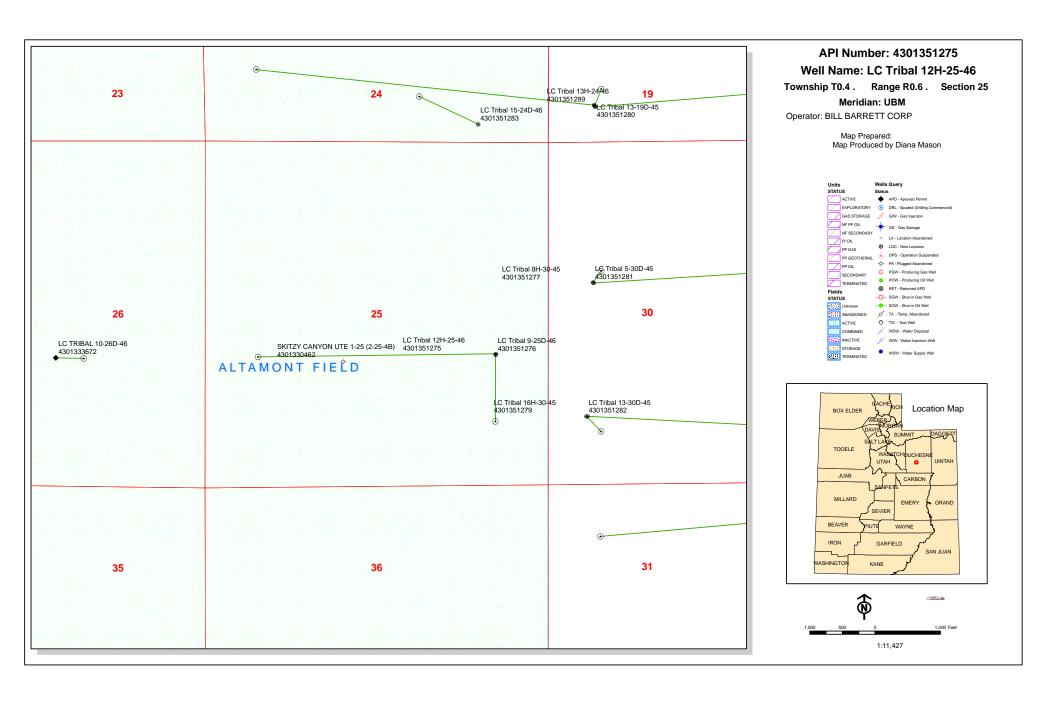


UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017







API Well Number: 43013512750000

#### **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 3/5/2012 API NO. ASSIGNED: 43013512750000

WELL NAME: LC Tribal 12H-25-46

**OPERATOR:** BILL BARRETT CORP (N2165) **PHONE NUMBER:** 303 312-8172

**CONTACT:** Venessa Langmacher

PROPOSED LOCATION: NESE 25 040S 060W Permit Tech Review:

> SURFACE: 2019 FSL 0802 FEL **Engineering Review:**

> BOTTOM: 2004 FSL 0810 FWL Geology Review:

**COUNTY: DUCHESNE** 

**LATITUDE**: 40.10224 LONGITUDE: -110.50509 UTM SURF EASTINGS: 542182.00 NORTHINGS: 4439222.00

FIELD NAME: ALTAMONT LEASE TYPE: 2 - Indian

LEASE NUMBER: 20G0005500 PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 2 - Indian **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** 

✓ PLAT R649-2-3.

Bond: INDIAN - LPM8874725 Unit:

**Potash** R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit** 

Board Cause No: Cause 139-87 Water Permit: 43-180

Effective Date: 12/6/2011 **RDCC Review:** 

Siting: 4 Prod LGRRV-WSTC Per Sectional Drilling Units Fee Surface Agreement

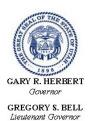
Intent to Commingle R649-3-11. Directional Drill

**Commingling Approved** 

Comments: Presite Completed

4 - Federal Approval - dmason 27 - Other - bhill Stipulations:

API Well No: 43013512750000



#### State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### Permit To Drill

\*\*\*\*\*\*

Well Name: LC Tribal 12H-25-46

**API Well Number:** 43013512750000 **Lease Number:** 20G0005500

Surface Owner: INDIAN

**Approval Date:** 3/14/2012

#### Issued to:

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-87. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas

API Well No: 43013512750000

website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
  - Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

# RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR MAR 0 7 2012
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

# APPLICATION FOR PERMIT TO DRILL OR REFNTER

5. Lease Serial No. 20G0005500

AFFEIGATION FOR FERIN	II TO DRILL ON REEM ER	o. Il liidian, Anottee of 1	nde Name	
1a. Type of Work:   DRILL   REENTER		7. If Unit or CA Agreeme	ent, Name and No.	
		8. Lease Name and Well	No.	
	Other Single Zone Multiple Zone	LC TRIBAL 12H-25-4		
2. Name of Operator Cont BILL BARRETT CORPORATION E-Mail: vlan	act: VENESSA LANGMACHER gmacher@billbarrettcorp.com	9. API Well No. 43-013-512	125	
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exp	ploratory	
1099 18TH STREET SUITE 2300 DENVER, CO 80202	Ph: 303-312-8172 Fx: 303-291-0420	ALTAMONT	•	
4. Location of Well (Report location clearly and in acc		11. Sec., T., R., M., or BI	k. and Survey or Area	
At surface NESE 2019FSL 802FEI	Sec 25 T4S R6W Mer UBM			
At proposed prod. zone NWSW 2004FSL 810FV				
<ol> <li>Distance in miles and direction from nearest town or p</li> <li>MILES SOUTHWEST OF DUCHESNE, U</li> </ol>	T	12. County or Parish DUCHESNE	13. State UT	
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)</li> </ol>	16. No. of Acres in Lease	17. Spacing Unit dedicate	ed to this well	
810' (BTM. HOLE)	123995.00	640.00	640.00	
<ol> <li>Distance from proposed location to nearest well, drillin completed, applied for, on this lease, ft.</li> </ol>	ng, 19. Proposed Depth	20. BLM/BIA Bond No. o	on file	
NONE	9312 MD 5738 TVD	LPM8874725		
21. Elevations (Show whether DF, KB, RT, GL, etc. 6828 GL	22. Approximate date work will start 05/01/2012	23. Estimated duration 60 DAYS (D&C)		
	24. Attachments			
he following, completed in accordance with the requiremen	ts of Onshore Oil and Gas Order No. 1, shall be attached to	this form:		
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest Supply S	4. Bond to cover the operation Item 20 above).  System Lands, the 5. Operator certification	ons unless covered by an exis		
25. Signature (Electronic Submission)	Name (Printed/Typed) VENESSA LANGMACHER Ph: 303-31	2-8172	Date 03/05/2012	
Title SENIOR PERMIT ANALYST				
Approved by (Signature)	Name (Printed/Typed)			
Jay Konghe	Jerry Kenczk	Date JUN 1 4 2		
Assistant Feld Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct			
perations thereon.	THOMS OF APPROVAL ATTACHED	ease which would entitle the	applicant to conduct	
title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 12 states any false, fictitious or fraudulent statements or represe	2, make it a crime for any person knowingly and willfully	o make to any department or	agency of the United	
additional Operator Remarks (see next page)			RECEIVED	
, , , , , , , , , , , , , , , , , , , ,	ssion #132187 verified by the BLM Well Infor	mation System	JUN 2 1 2012	
For BI	LL BARRETT CORPORATION, sent to the Ve	rnal	JUN 2 ' 2012	
For BII OTICE OF APPROVAL Committed to AF	WSS for processing by LESLIE ROBINSON o	DOGN	. OF OIL, GAS & MINING	

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

11TJL0013AE

x05 9/20/11



#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

**VERNAL, UT 84078** 

(435) 781-4400



### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No: API No:

**Bill Barrett Corporation** 

LC Tribal 12H-25-46

43-013-51275

Location:

NESE, Sec. 25, T4S, R6W

Lease No: 2OG0005500

Agreement:

N/A

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

#### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	_	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well: LC Tribal 12H-25-46 6/14/2012

#### SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### Additional Stipulations:

- Production Equipment will be painted Beetle Green to help blend into the surrounding vegetation.
- See Exhibit One of the approved EA U&O-FY12-Q2-067 for additional mitigation measures that
  must be followed for each of the proposed well locations. There are also site specific COAs of
  concern towards the back of that document

#### **General Conditions of Approval:**

- A <u>30</u> foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- Bill Barrett Corporation will implement a "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, COA's, and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.

Page 3 of 7 Well: LC Tribal 12H-25-46 6/14/2012

 Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

#### DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

- A CBL shall be run from PBTD (Intermediate 7" casing) to TOC.
- Cement for the 7 inch casing will be brought to a minimum of 200 feet above the surface casing shoe.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
  is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
  Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth

Page 5 of 7 Well: LC Tribal 12H-25-46 6/14/2012

(from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: LC Tribal 12H-25-46 6/14/2012

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

Page 7 of 7 Well: LC Tribal 12H-25-46 6/14/2012

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 35019 API Well Number: 43013512750000

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING  SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL Oil Well 2. NAME OF OPERATOR: BILL BARRETT CORP 3. ADDRESS OF OPERATOR: BILL BARRETT CORP 3. ADDRESS OF OPERATOR: 1099 18th Street Sie 2300, Denver, CO, 80202 303 312-8164 Ext 4. LOCATION OF WELL OCITION OF WELL OUT/CIT: NESS Section: 25 Township: 04.0S Range: 06.0W Meridian: U  TYPE OF SUBMISSION  TYPE OF ACTION  TYPE OF ACTION  ACIDIZE  ALTER CASING CASING REPAIR  5.LEASE DESIGNATION AND SERIAL NUMBER: 20G00005500  6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Uintah  7.UNIT or CA AGREEMENT NAME: Uintah  7.UNIT or CA AGREEMENT NAME: Uintah  7.UNIT or CA AGREEMENT NAME:  8. WELL NAME and NUMBER: 4.013512750000  9. API NUMBER: 4.013512750000  9. API NUMBER: 4.013512750000  9. PIELD and POOL or WILDCAT: ALTAMONT  4. LOCATION OF WELL 5. STATE: UTAH  TYPE OF SUBMISSION  TYPE OF ACTION
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION  1. TYPE OF WELL Oil Well  2. NAME OF OPERATOR: BILL BARRETT CORP  3. ADDRESS OF OPERATOR: 1. 1099 18th Street Ste 2300 , Denver, CO, 80202  3. ADDRESS OF OPERATOR: 2. OF OPERATOR: 3. OF OPERATOR: 3. OF OPERATOR: 3. OF OPERATOR: 4. LOCATION OF WELL OIT WEL
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION  7.UNIT or CA AGREEMENT NAME:  7.UNIT or CA AGREEMENT NAME:  7.UNIT or CA AGREEMENT NAME:  8. WELL NAME and NUMBER:
7.UNIT of CA AGREEMENT NAME: FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL Oil Well 2. NAME OF OPERATOR: BILL BARRETT CORP 3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202 303 312-8164 Ext 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2019 FSL 0802 FEL QTR/QTR: NESE Section: 25 Township: 04.0S Range: 06.0W Meridian: U  11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    ALIER CASING   CASING REPAIR
Oil Well  2. NAME OF OPERATOR: BILL BARRETT CORP  3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, Denver, CO, 80202  4. LOCATION OF WELL FOOTAGES AT SURFACE: 2019 FSL 0802 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 25 Township: 04.0S Range: 06.0W Meridian: U  11.  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  LC TRIBAL 12H-25-46  9. API NUMBER: 43013512750000  9. FIELD and POOL or WILDCAT: ALTAMONT  ALTAMONT  COUNTY: DUCHESNE  STATE: UTAH  TYPE OF ACTION  TYPE OF ACTION
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ACIDIZE ALTER CASING CASING REPAIR
NOTICE OF INTENT
Approximate date work will start: CHANGE TO PREVIOUS PLANS CHANGE TUBING CHANGE WELL NAME
1/1/2014 CHANGE WELL STATUS COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE
SUBSEQUENT REPORT DEEPEN FRACTURE TREAT NEW CONSTRUCTION
Date of Work Completion:  OPERATOR CHANGE  PLUG AND ABANDON  PLUG BACK
PRODUCTION START OR RESUME RECLAMATION OF WELL SITE RECOMPLETE DIFFERENT FORMATION
SPUD REPORT
REFERENCE CORRENT FORMATION SIDETRACK TO REPAIR WELL SIDETRACK TO REPAIR WELL
TUBING REPAIR
☐ DRILLING REPORT ☐ WATER SHUTOFF ☐ SI TA STATUS EXTENSION ☐ APD EXTENSION ☐
WILDCAT WELL DETERMINATION OTHER OTHER:
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
BBC hereby requests a one year extension of the subject APD.  Approved by the
Utah Division of Oil, Gas and Mining
Date: March 04, 2013
By: Backfill
NAME (PLEASE PRINT)  Venessa Langmacher  PHONE NUMBER 303 312-8172  Senior Permit Analyst
SIGNATURE         DATE           N/A         2/26/2013

Sundry Number: 35019 API Well Number: 43013512750000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013512750000

API: 43013512750000 Well Name: LC TRIBAL 12H-25-46

Location: 2019 FSL 0802 FEL QTR NESE SEC 25 TWNP 040S RNG 060W MER U

Company Permit Issued to: BILL BARRETT CORP

Date Original Permit Issued: 3/14/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?       Yes       No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes No
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Venessa Langmacher Date: 2/26/2013

Signature: Venessa Langmacher **Date:** 2/26/2013

Title: Senior Permit Analyst Representing: BILL BARRETT CORP

#### UEDE! A FD

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JUN 6 4 2014

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

5. Lease Serial No. 20G0005500

SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an abendoned well. Use form 3160-3 (APD) for such proposals.					20G0005500  6. If Indian, Allottee or Tribe Name		
1. Type of Well					8. Well Name and No.	E AR	
■ Oil Well □ Gas Well □ Otl					LC TRIBAL 12H-2	5-40	
2. Name of Operator BILL BARRETT CORP.	Contact: E-Mail: chirtler@bii	CHRISTINA R	HIRTLER	,	9. API Well No. 43-013-51275		
3a. Address 1099 18TH STREET SUITE 2	3b. Phone No. (i Ph: 303-312-		ie)	10. Field and Pool, or Exploratory WILDCAT			
DENVER, CO 80202  4. Location of Well (Footage, Sec., 1	" D. M. on Surman Description				11. County or Parish, a	and State	
Sec 25 T4S R6W Mer UBM N 40.102306 N Lat, 110.505158				DUCHESNE CO			
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE N	ATURE OF	NOTICE, RE	PORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			TYPE	OF ACTION		`	
	☐ Acidize	Deeper	n	☐ Producti	on (Start/Resume)	☐ Water Shut-Off	
Notice of Intent	Alter Casing	☐ Fractu	re Treat	☐ Reclama	tion	☐ Well Integrity	
☐ Subsequent Report	Casing Repair	□ New C	Construction	Recomp	lete	Cther	
☐ Final Abandonment Notice	Change Plans	Plug a	nd Abandon	☐ Tempora	rily Abandon		
	☐ Convert to Injection ☐ Plug B		ack	☐ Water Disposal			
BBC IS SUBMITTING THIS S EXPIRES OF 06/14/2014	UNDRY TO REQUEST A	TWO YEAR E	XTENSION	FROM THE DA		APD L FIEED OFFICE	
					•		
			POST		ENG.	10/7/14	
			OCT 16	2011	GEOL.	· ·	
			nc. 7 16	5014			
			0.0	- o Missis	E.S		
		i . Di	v. OF OIL, C	SAS&MINITED	°ET		
14. I hereby certify that the foregoing is	true and correct				TEOL.		
14. Thorough constraint and totogoning in	Electronic Submission #	148155 vertfied b	y the BLM W	feli information	System		
	Committed to AFMSS for	BARRETT CORP proceeding by	JOHNETTA I	MAGEE on 06/10	V2014 ()		
Name (Printed/Typed) CHRISTIN	NA R HIRTLER	T	itle PERN	MIT ANALYST			
Signature (Electronic S	Submission)	E	Date 06/04	/2014			
	THIS SPACE FO	R FEDERAL	OR STATI	E OFFICE US	38		
Approved By				Assistant Field		QCT 0 3 2014	
Conditions of appeara, if say, are attached certify that the apparant tolds logal or equivalent would entitle the applicant to conduct the applicant the a	d. Approval of this notice does uitable title to those rights in the	not warrant or subject lease	Office	inde & Mineral VERNA	L FIELD OFFIC	Œ	
Title 18 U.S.C. Section 1001 and Title 43				nd willfully to me	te to any department or	agency of the Linited	
States any false, fictitious or fraudulent	statements or representations as	to any matter with	in its jurisdictio	n.			

## **CONDITIONS OF APPROVAL**

## **Bill Barrett Corporation**

#### Notice of Intent APD Extension

Lease:

2OG0005500

Well:

LC Tribal 12H-25-46

Location:

NESE Sec 25 T4S-R6W

An extension for the referenced APD is granted with the following conditions:

- 1. The APD extension shall expire on 6/14/16
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Michael Riches of this office at (435) 781-4438